

IN THE CLAIMS

1. (currently amended) Safety pedal for bicycles, comprising:

C1
~~a device for quick coupling to a cleat fastened to a sole of a shoe, including a~~
toe element for receiving a front end of ~~the~~ a cleat fastened to a sole of a shoe and a
rear fastening device for engaging ~~the~~ a rear end of the cleat when the rear end of
the cleat is pressed over said rear fastening device and for releasing the cleat when
the rear end of the cleat is rotated in ~~the~~ a general plane of the pedal so the rear
end of the cleat is moved laterally, said pedal comprising inward and outward edges
and a resting surface for the cleat contact surface including ~~cam~~ unidirectional
means for opposing ~~said releasing~~ rotation of the cleat, and for lifting ~~the~~ a side of
the cleat adjacent to the outward side of the pedal, ~~which is moved away from the a~~
~~centre of the pedal when said releasing rotation is imposed on the cleat,~~

~~wherein said cam means are only arranged on the a side of the pedal~~
~~facing outwards relative to the a mounted condition on the bicycle, so as to be~~
~~operative only when the rear end of the cleat is moved laterally outwards, with~~
~~respect to the bicycle, starting from the engaged position~~ toward the outward side of
the pedal.

2. (currently amended) Safety pedal according to claim 1, wherein ~~the~~ an
internal side of said ~~resting surface~~ cleat contact surface does not present any

Applicant: Valentino Campagnolo
Application No.: 09/886,123

means for opposing the rotation of the cleat, so that a lateral inwards movement of the rear end of the cleat, from the engaged position, does not lift the internal side of the cleat.

3. (previously presented) Safety pedal according to claim 1, wherein ~~said~~ ~~cam means~~ the means for opposing rotation is a ramp integral with a metal plate fastened to the pedal defining the ~~resting surface~~ cleat contact surface.


cl
4. (currently amended) Safety pedal according to claim 3, wherein ~~said~~ a stop is defined by a projection integral with ~~a~~ the metal plate fastened to the pedal defining the ~~resting surface~~ cleat contact surface.

5. (currently amended) Safety pedal according to claim 3, wherein ~~said~~ a stop is defined by a projection made by drawing on ~~a~~ the metal plate fastened by means of screws to the body of the pedal and defining said ~~resting surface~~ cleat contact surface.

6. (currently amended) Safety pedal according to claim ~~3~~ 4, ~~characterised~~ characterized in that said stop comprises a stopping surface, which is essentially

perpendicular to said ~~resting surface~~ cleat contact surface and to the axis of the pedal ~~pin~~.

7. (currently amended) Safety pedal for bicycles for quick coupling to a cleat fastened to the sole of a shoe, the cleat having a front end, a rear end having an upper cam surface, a laterally-extending base foot and a chamfered lower cam surface, and a longitudinal axis extending from the front end to the rear end, said pedal comprising:

- 
- a) a generally planar pedaling surface;
 - b) a base plate fixed to said pedaling surface;
 - b) a first seat for removably locking the front end of the cleat on said pedal;
 - c) a second seat for removably locking the rear end of the cleat on said pedal, said second seat including bias means cooperatively engaged with the upper cam surface, said bias means movable between a locking position preventing movement of said cleat upward relative to the pedaling surface and a releasing position allowing movement of said cleat upward relative to the pedaling surface;
 - d) ~~cam~~ means for opposing rotation on only ~~one~~ a side of said base plate for resisting movement of the cleat in ~~one sideward~~ a direction laterally outward with respect to the bicycle relative to the pedaling surface, said ~~cam~~ means for

opposing rotation rotating said cleat about its longitudinal axis when said cleat is moved in the laterally outward ~~said one sideward~~ direction;

wherein said an upper wedge portion inclined surface of the means for opposing rotation urges said bias means from the locking position to the releasing position when the rear end of said cleat is moved sidewardly in either direction relative to the plane of the pedaling surface.

8. (previously presented) The pedal recited in claim 7, wherein said ~~cam~~ means for opposing rotation engages the lower cam surface of said cleat.


9. (previously presented) The pedal recited in claim 7, wherein said bias means has a shape which compliments the shape of said upper cam surface.

10. (previously presented) The pedal recited in claim 7, wherein said bias means retracts and locks when the rear end of the cleat is moved downwardly relative to the plane of the pedaling surface and is engaged with said second seat.

11. (previously presented) The pedal recited in claim 10, wherein said bias means is retracted by the lower cam surface of the cleat.

12. (previously presented) The pedal recited in claim 11, wherein said bias means engages the base foot in the locking position.

13. (currently amended) The pedal recited in claim 7, further including a stop means positioned on said base plate for limiting movement of the rear end of said cleat in a laterally inward direction relative to the bicycle ~~direction opposite said one sideward direction relative to the plane of the pedaling surface.~~


 14. (previously presented) The pedal recited in claim 13, wherein said stop means comprises a tab inclined perpendicularly relative to and integrally formed with said base plate.

15. (currently amended) The pedal recited in claim 7, wherein said ~~cam~~ means for opposing rotation is positioned on said base plate to resist movement of the rear end of the cleat in ~~the~~ an outward direction relative to the bicycle.

16. (currently amended) The pedal recited in claim 15, further including a stop means positioned on said base plate for limiting movement of the rear end of said cleat in ~~the~~ an inward direction, opposite the outward direction, relative to the bicycle.

17. (currently amended) The pedal recited in claim 7, wherein said ~~cam~~ means for opposing rotation ~~comprises a step~~ is integral with and upwardly inclined with respect to said base plate.

18. (currently amended) A cyclist safety pedal combination for use with a bicycle, the combination comprising:

 a) a cleat for fastening to a sole of a cyclist's shoe, said cleat including a front end, a rear end having an upper cam surface, a laterally-extending base foot and a chamfered lower cam surface, and a longitudinal axis extending from the front end to the rear end;

b) a pedal comprising:

i) a generally-planar pedaling surface;

ii) a base plate having means for fastening to said pedal surface;

iii) a front seat for removably locking the front end of the cleat on said pedal;

iv) a rear seat for removably locking the rear end of the cleat on said pedal, said ~~second~~ rear seat including bias means cooperatively engaged with the upper cam surface of said cleat, said bias means movable between a locking position preventing movement of said cleat upward relative to the a

plane of said pedaling surface and a releasing position allowing movement of said cleat upward relative to the plane of said pedaling surface; and,

v) ~~cam~~ means on only one side of said base plate for resisting movement of the rear end of the cleat ~~in one sideward~~ in a laterally outward direction relative to the plane of said pedaling surface, said cam means rotating said cleat about its longitudinal axis when said cleat is moved in the laterally outward direction ~~said one sideward direction~~;

cl
ca
wherein said upper ~~wedge portion~~ cam surface urges said bias means from the locking position to the releasing position when the rear end of said cleat is moved relative to the plane of said pedaling surface.

19. (currently amended) The pedal combination recited in claim 18, wherein said ~~first~~ front seat is integrally formed with said base plate.

20. (currently amended) A quick coupling safety pedal and shoe combination, the combination comprising:

a shoe having a sole with a cleat fastened to it, the cleat having a front end, a rear end having an upper cam surface, a laterally-extending base foot and a chamfered lower cam surface, and a longitudinal axis extending from the front end to the rear end; and,

a pedal comprising:

- a) a generally planar pedaling surface;
- b) a base plate fixed to the pedaling surface;
- b c) a first seat for removably locking the front end of the cleat on the

pedal;

c1
cut
e d) a second seat for removably locking the rear end of the cleat on the pedal, the second seat including bias means cooperatively engaged with the upper cam surface, said bias means movable between a locking position and a releasing position;

d e) ~~cam~~ means on a selected side of the base plate for resisting movement of the cleat in ~~the selected~~ a laterally outward direction relative to the pedaling surface and rotating the cleat about its longitudinal axis when the cleat is moved in the ~~selected~~ laterally outward direction;

wherein said upper ~~wedge portion~~ cam surface urges the bias means from the locking position to the releasing position when the rear end of said cleat is moved laterally outward relative to the plane of the pedaling surface.

21. (previously presented) The combination of claim 20 wherein the first seat is integrally formed with the base plate.

22. (currently amended) The combination of claim 20 wherein the ~~cam~~ means for resisting engages the lower cam surface of the cleat.

23. (previously presented) The combination of claim 20 wherein the bias means is shaped to compliment the shape of the upper cam surface.

24. (new) The pedal combination recited in claim 18, wherein the front seat is U-shaped having two joining members formed integral with said pedaling surface, and a substantially open area between the joining members.

25. (new) A cleat contact plate for a bicycle safety pedal that engages with a cleat fastened to a rider's shoe, the safety pedal having a front portion, a rear portion, an inward portion and an outward portion which define an outline of the pedal and an upper plane; the cleat having a front portion, a rear portion, an inward portion and an outward portion which define an outline of the cleat on a lower plane; the cleat's outlines fits within the pedal's outline and its lower plane opposes the pedal's upper plane; and the pedal's upper plane includes a upwardly extending locking member which releasable engages the rear portion of the cleat to retain the cleat in the pedal, and an area adjacent to the locking member for fixing a cleat contact plate, the cleat contact plate comprising:

Applicant: Valentino Campagnolo
Application No.: 09/886,123

a base plate having inward and outward portions and means for fixing the cleat contact plate to the pedal's upper plane, the base plate's outward portion includes a single ramp positioned to contact a rear outward portion of the cleat only when the cleat is rotated outwardly and to release the cleat from the locking member.

26. (new) A contact plate for a bicycle safety pedal that engages with a cleat fastened to a rider's shoe, the safety pedal having a front portion, a rear portion, an inward portion and an outward portion which define an outline of the pedal and an upper plane; the cleat having a front portion, a rear portion, an inward portion and an outward portion which define an outline of the cleat on a lower plane; the cleat's outlines fits within the pedal's outline and its lower plane opposes the pedal's upper plane; and the pedal's upper plane includes a upwardly extending locking member which releasably engages the rear portion of the cleat to retain the cleat in the pedal, and an area adjacent to the locking member for fixing a contact plate comprising:

a base plate having inward and outward portions and means for fixing the contact plate to the pedal's upper plane, the plate's outward portion includes a single ramp positioned to contact a rear outward portion of the cleat only when the cleat is rotated outwardly and to release the cleat from the locking member.

27. (new) A safety pedal for a bicycle comprising:

CJP
a device for quick coupling to a cleat fastened to a sole of a shoe, including a toe element for receiving a front end of the cleat and a rear fastening device for engaging a rear end of the cleat when the rear end of the cleat is pressed over said rear fastening device and for releasing the cleat when the rear end of the cleat is rotated in a general plane of the pedal so the rear end of the cleat is moved laterally, said pedal comprising a resting surface for the cleat including means for opposing said releasing rotation of the cleat, and for lifting a side of the cleat, which is moved away from a centre of the pedal when said releasing rotation is imposed on the cleat,

wherein the means for opposing is only arranged on a side of the pedal facing outwards relative to a mounted condition on the bicycle, so as to be operative only when the rear end of the cleat is moved laterally outwards, with respect to the bicycle, starting from the engaged position, and

wherein a stop is defined by a projection integral with the pedal that prevents the cleat from moving laterally inwards with respect to the bicycle.

28. (new) The safety pedal of claim 27 wherein the stop projects substantially perpendicular to the pedal.